

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX LABORATORY 1337 S. 46TH STREET BLDG. 201 RICHMOND, CA 94804-4698

MAY 2 1 2002 MEMORANDUM

SUBJECT: Case R02S15, SDG 02116A

Results for Perchlorate Analysis

FROM: Brenda Bettencourt, Director

EPA Region 9 Laboratory (PMD-2)

TO: Kevin Mayer, Remedial Project Manager

Superfund Site Cleanup Section 2 (SFD-7-2)

Attached are the report narrative and results spreadsheet from analysis of samples from the Colorado River Perchlorate Study. These data have been reviewed in accordance with EPA Region 9 Laboratory policy. Summary information for the data included in this report is as follows:

SITE/PROJECT: Colorado River Perchlorate Study

CASE: R02S15

LABORATORY: U. S. EPA Region 9 Laboratory

SAMPLE DELIVERY GROUP(s): 02116A

ANALYSIS: Perchlorate (EPA method 314.0)

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Vance Fong at the Region 9 Quality Assurance Office.

If you have any questions please contact Rich Bauer at (510) 412-2312, or Ken Hendrix at (510) 412-2321.

ATTACHMENT: Analytical Report

USEPA REGION 9 LABORATORY REPORT NARRATIVE

CASE NUMBER:

R02S15

SAMPLE DELIVERY GROUP:

02116A

PROGRAM:

SUPERFUND

DOCUMENT CONTROL#:

B0101057-1479

DATE:

05/15/02

ANALYSIS:

SAMPLE NUMBER:

Perchlorate

SAMPLE ID

LABORATORY SAMPLE ID

LV Wash @N. Shore Rd. Bridge

AB35164

GENERAL COMMENTS

One water sample was received from the Colorado River Study Superfund project on 04/26/02.

The requested analysis was perchlorate by Region 9 Laboratory SOP #531 (EPA Method 314.0). The perchlorate analysis was performed within the suggested 28-day holding time.

SAMPLE RECEIPT AND PRESERVATION

No custody seal was present on the sample cooler. No other shipping or preservation issues were encountered.

OC COMMENTS

No perchlorate was detected in the LRB associated with this SDG.

The perchlorate result for QC sample AB35164 was greater than 4 times the added 5ug/L and 25ug/L LFM spikes. No LFM or LFM duplicate recoveries were calculated for perchlorate.

The RPD between the sample and duplicate for perchlorate was less than or equal to the 20% QC limit.

The perchlorate LFB recovery was within the 90-110% QC limit.

Questions concerning the data can be answered by Osell Salvador at (510) 412-2358.

Laboratory Reagent Blanks (LRB)

A laboratory reagent blank is laboratory reagent water or baked sand with all reagents added and carried through the same sample preparation and analytical procedures as the field samples. The laboratory reagent blank is used to determine the level of contamination introduced by the laboratory during analysis.

<u>Laboratory Fortified Matrix (LFM), Laboratory Fortified Matrix Duplicate (LFMD) and Laboratory Duplicate (LD) Analysis</u>

The laboratory fortified matrix spike sample and laboratory duplicate analyses provide information about the effect of the sample matrix on sample preparation and measurement. Poor percent recovery (%R) results and large relative percent difference (RPD) between duplicates may indicate inconsistent laboratory technique, sample nonhomogeneity in soils, or matrix effects which may interfere with analysis.

Laboratory Fortified Blank (LFB) Analysis

The laboratory fortified blank is laboratory reagent water or baked sand with a known concentration of the analytes of interest added by the laboratory with all reagents added and carried through the same sample preparation and analytical procedures as the field samples. Poor percent recovery (%R) results may indicate inconsistent laboratory technique.

EPA Region 9 Laboratory - Richmond, CA SUMMARY OF ANALYTICAL RESULTS

Site:

Colorado River Study

Case:

R02S15

SDG:

02116A

Date:

05/15/02

Analysis:

Perchlorate

Matrix:

Water

Sample No.		1	LV Wash @ N Sho	re Rd		Filtered				
Lab Sample I.D.			AB35164			Reagent Blank				Method QL
Collection Date			04/25/02			N/A				
Units			ug/L			ug/L				ug/L
Analyte	CAS#	EPA Method	Result	Q	Com	Result		Q	Com	QL
Perchlorate		314.0	400		V	2	U		:	2

Com - Comments refer to the corresponding section in the report narrative for each letter.

N/A - Not Applicable.

N/R - Not Required.

Q - Refer to data qualifiers.

U - Parameter analyzed, but not detected; associated value is quantitation limit, adjusted for dilution.

J - The associated value is an estimated quantity.

The results are reported in ug/L.